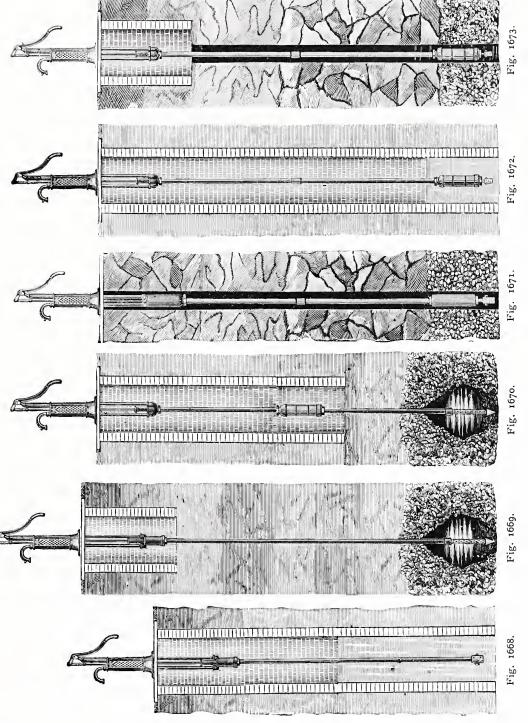
## BUCKEYE FORCE PUMPS.

AS ADAPTED FOR DIFFERENT WELLS.



See following page for explanation. Order by this Catalogue Figure Number, stating size wanted.

## BUCKEYE FORCE PUMPS.

The illustrations on page 539 show the different kinds of wells with the Buckeye Pump adapted for each. It is important that a deep well pump should be made of the best material, strong and substantial, and that the lower part be so well supported that it will not tremble or sway to one side.

In the Buckeye Deep Well Pump the top is made with two pipes extending into the well, and the entire weight of the water and lower part is secured by these pipes, one on each side. This not only holds the working parts all strictly in line, but maintains the entire pump firmly in its right position, which cannot be accomplished by single or side support. All our deep well pumps throw a continuous stream, and the top is made to ventilate the well, keeping the water pure.

Fig. 1668 represents a dug well not over 25 feet deep and the Buckeye Pump set complete ready for operation. Our trade Nos. 201, 204, 254 and 100 are especially adapted for this depth wells.

Fig. 1669 represents a driven well, shown with top dug down and bricked up, in order that the cylinder may be placed below freezing point. In all wells of this kind we would urge the use of points of large capacity, also that the cylinder be kept within twenty feet of the lower end of the point. If these two things are observed the driven well pumps will give much better satisfaction.

For  $1\frac{1}{4}$ -inch drive point, use trade No. 201; for  $1\frac{1}{2}$ -inch, use trade No. 204; for 2-inch, use trade No. 254. It will be found a good plan to use  $1\frac{1}{2}$ -inch point with trade No. 201 and 2-inch point with trade No. 204.

Fig. 1670 represents a dug well with pipe and point driven down. For this class of wells we would recommend any of the pumps trade numbered 215 to 234 inclusive, according to the depth and amount of water desired. This is a simple way of deepening dug wells, where the soil is such, a drive point can be used.

Fig. 1671 represents our Buckeye Force Pump in a bored or drilled well, with the casing extending upward to the surface of the ground and the platform placed on top of the casing. In such, a force pump throwing a steady stream of the largest capacity possible for wells of 4 or 5-inch bore is desired. We recommend for all bored wells our pumps trade numbered 415 to 439 inclusive.

Fig. 1672 shows an ordinary dug well, bricked up, and exceeding 30 feet in depth. For such wells we advise trade Nos. 215, 216, 217, 218 or No. 220, according to amount of water desired.

Fig. 1673 shows an ordinary drilled or bored well, with a dry well at surface in which to place upper pump cylinders below frost. For these wells of 6-inch bore or larger use any of our deep well pumps. We would recommend, in cases where it is necessary to deepen old wells, that this method be adopted wherever possible, as it is much preferable to the style shown in Fig. 1670.

#### NOTES.

We recommend when setting deep well pumps that the lower cylinder be placed in the water within six to nine inches of the bottom of the well, as the valves will then be always submerged and not so liable to get out of order. The upper cylinder is one-half the capacity of the lower one, and no change of cylinders should ever be made. Each pump must be used with its appropriate cylinder as designated. The substitution of a different sized lower cylinder than that mentioned on the List effectually destroys the mechanical principles on which the pump is made, causes the pump to work innevenly, breaks the constant stream, and will fail to give satisfaction.

Pumps are priced without suction pipe. If pipe is wanted, state in your order whether black or galvanized; also give depth from top of platform to bottom of well, and depth of water in well in dry season.

The prices given in our Lists all include an iron strainer for the lower end of the suction pipe and our quick-acting hose connection to attach hose to spout of pump. In referring to price-list of deep well pumps the price includes the lower cylinder and sufficient pipe and plunger rod to set the bottom of upper cylinder five feet below the platform.

## BUCKEYE FORCE PUMPS-CONTINUED.

The value of a pump is determined by its durability, simplicity, the ease with which it is operated in deep wells, protection from frost in winter, etc. The Buckeye Pump possesses all these valuable qualities in a greater degree than any other pump in the market. There are thousands of them in use in every part of the country, and the great demand created for them wherever introduced attests their value.

#### DURABILITY.

The working and wearing part of a pump is the Cylinder. If that is defective the pump cannot work well, no matter how substantial the balance of the pump may be or how attractive in appearance. The cylinders of the Buckeye are made of brass or iron,

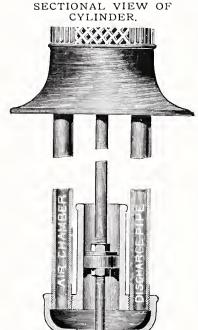


Fig. 1674.

BRASS-

lined with porcelain, which, being as smooth and hard as glass, does not wear the leather packing of the plungers. We use only the best leather for the valves, and all material used in the manufacture of the Buckeye Pump is calculated to do good service for years. All the New Style Pumps are fitted with our New Patent Brass Valve Seat.

#### SIMPLICITY.

We call especial attention to the simplicity of construction of this pump; there is no stuffing or packing box as in most force pumps, and this fact alone should recommend the Buckeye above all others. The valves are simple and substantial, and not liable to clog with sand and dirt.

#### EASE OF OPERATION.

As but one-half of the water in cylinder is discharged with each motion of the handle, the friction of the water passing through the pipe is greatly reduced. This is an important con-sideration. They are especially desirable for deep wells, as a woman or child can use them in ordinary wells.

#### PROTECTION FROM FROST.

Each pump is provided with a small waste hole, not larger than a darning needle, in the discharge pipe, four feet below the platform, which will always allow the water to settle down to that point in the pipe after pumping, and is a sure protection against frost.

#### GENERAL EFFICIENCY.

The water starts with the first or second motion of the handle, and the flow ceases the moment you stop pumping, leaving no drippings to form mud or ice on or around the platform. It throws a steady stream, and will force water 60 feet from the end of the hose nozzle.

#### CAPACITY.

The inquiry is often made, "How much water will the Buckeye Pump supply in an hour or day?" The answer depends entirely on the length of stroke, size of cylinder and number of strokes per minute. A four-inch cylinder will furnish nearly double that of a three-inch, with the same stroke.

We give, on page 515, capacities of pumps which apply equally well to the Buckeye as to all others.

#### PROTECTION FROM FIRE.

Each pump is provided with a hose coupling which can be instantly attached to the spout, and water forced to any part of the

Fig. 1674. buildings or grounds. It is invaluable in case of fire—an engine ever ready at your door. John H. Beecher, Esq., general agent of the Ohio Farmers' Insurance Company, says: "Having made a careful examination of the Buckeye Force Pump, I take pleasure in recommending it to all owners of buildings. It possesses great power, easily throwing water on the top of ordinary buildings. The use of the Buckeye in cases of fire would be of untold value." It is very convenient for washing buggies, sprinkling lawns, watering flower-beds, washing windows and like purposes.

DESCRIPTION OF WORKING PARTS.

The above cnt (Fig. 1674) illustrates the cylinder or working part of our pump. It will be observed that the upper part of the cylinder is the smaller, being one-half the capacity of the lower part. The cylinder is provided with two plungers connected together with an iron rod. The upper plunger is solid, and the pressed leather packing fits the cylinder closely, which prevents the water escaping out of the top of the cylinder. The lower plunger also fits nicely, and has a valve which opens on the down stroke and allows the water to pass through and closes on the up stroke.

## BUCKEYE FORCE PUMPS-CONTINUED.

#### FOR CISTERNS AND SHALLOW WELLS.

#### BUCKEYE CISTERN PUMPS.

The Pumps shown on this page represent Buckeye Pumps adapted for cisterns; they can also be used for shallow wells.

Fig. 1675 has a three-inch cylinder two feet below platform. It is only adapted to be set upon a sink or stand, and is very convenient in greenhouses, or for filling reservoirs by the use of hose, as well as for protection against fire.

Fig. 1676 has the same size cylinder, but it is located above the base. Both are double-acting and pump a continuous stream.

In order to keep the Figs. 1675 and 1676 from freezing, the handle must be raised and the valve tripped so that the water can run down.

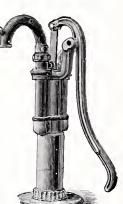


Fig. 1676.

Fig. 1675.

### BUCKEYE SHALLOW WELL PUMP.

In all cases where circumstances will admit the use of such a pump as is shown by Fig. 1677, it is by all means preferable. It has the cylinder down below freezing point, and will regulate itself so far as freezing is concerned.

This pattern pump is made in 3,  $3\frac{1}{2}$ , 4 and 5-inch cylinder, and each can be fitted with Martin's three-way attachment, as shown in Fig. 1679. Any of these pumps can be used in cisterns 6 feet or more in depth. We also furnish these pumps with  $9\frac{1}{2}$ -foot set lengths.

All prices named do not include Suction Pipe or Hose. For prices, see their respective List. Strainer for suction pipe, also hose coupling for hose, attached to each pump.

	Trade No.	Size Cylinder.	Fitted For,	Set Length.	Depth Well.	Price.	With Three Way Cock.
Fig. 1675.	75	3 -inch.	1‡-inch,	2 ft.	20 ft.	\$12.00	
1676.	70	3 "	11 "	None.		9.00	
1677.	201	3 "	11 "	5 ft. 6 in.	26 ft.	14.00	16 00
" 1677.	204	31 "	13 "	5 " 6 "	26 "	16.00	18.50
" 1677.	254	4 "	2 "	5 " 6 "	26 "	17.00	19.50
" 1677.	257	5 "	21 "	5 " 6 "	26 "	30.00	33.00
" 1677.	202	ă "	11 "	9 " 6 "	26 to 30 ft.	15.50	17.50
" 1677.	205	33 44	11 44	9 " 6 "	26 " 30 "	17.50	20.00
1677.	259	4 "	2 "	9 " 6 "	26 " 30 "	18.50	21.00

Three-way discharge fitted for 1-inch or 3-inch pumps;  $1\frac{1}{4}$  on  $3\frac{1}{2}$  and 4-inch pumps.

For price of 5-inch, Fig. 1577, see page 545.

Figs. 1668 to 1673, page 559, show pumps in operation



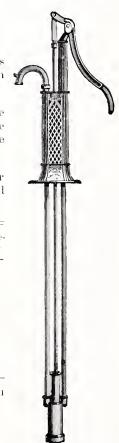


Fig. 1677.

## BUCKEYE FORCE PUMPS - CONTINUED.

#### FOR DEEP WELLS.

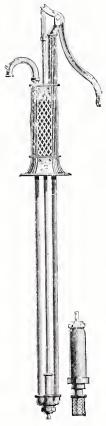


Fig. 1678.

All of the Buckeye Deep Well Pumps have brass upper cylinders, and either porcelain-lined, brass, or bored iron lower cylinders. The upper and lower cylinders are connected by pipe with a rod running through it to connect and operate the upper and lower plungers. We recommend that lower cylinder be placed in the water within 6 to 9 inches of the bottom of the well, as the valves will then be always submerged and not so liable to get out of order. The upper cylinder is one-half the capacity of the lower one, and no change of cylinders should ever be made, Each pump must be used with its appropriate cylinder as designated below. The substitution of a different sized lower cylinder than that mentioned on the list effectually destroys the mechanical principles on which the pump is made, causes the pump to work unevenly. breaks the constant stream, and will fail to give satisfaction. We furnish the following sizes:



Fig. 1679.

Fig.	Trade No, for Hand Use	Adapted for Well.	Price with Cylin		Price with Brass Cy		Price witl Brass Cy		Trade No. for Power Use.
1678. 1678. 1678. 1678. 1678.	215 216 217 218 220 120	30 to 70 feet. 30 " 50 " 100 feet and over. 30 to 100 feet. 30 " 40 " 25 " 70 "	3 -iuch, 3½ 2¼ 2½ 4 5	\$15.00 17.00 15.00 15.00 19.50 40.00	3 -inch. $\frac{3\frac{1}{2}}{2\frac{1}{4}}$ " $\frac{2\frac{1}{4}}{2\frac{1}{2}}$ "	\$17.00 19.00 17.00 17.00	3 -inch, 2\frac{1}{4} \\ \frac{2}{2\frac{1}{2}} \\ \text{``}	\$18.50 18.50 18.50	Add \$1.00 to Hand List.

Fig. 1679. With Martin's 3-Way Cock, add \$2.00 to trade Nos. 215, 217, 218; \$2.50 to trade Nos. 216, 220.

For sizes of Pipe, etc., see page 513.

Can furnish lower Cylinders either capped outside or inside; see Cylinder List. Cylinders shown above are capped outside. Figs. 1668 to 1673 illustrate Pump in operation. Trade No. 120 has double brake same as Fig. 1682.

Order by this Catalogue Figure Number, stating size wanted.

## BUCKEYE FORCE PUMPS - CONTINUED.

FOR SHALLOW AND CASED WELLS.

BUCKEYE SHALLOW WELL PUMP.

BUCKEYE CASING PUMP.

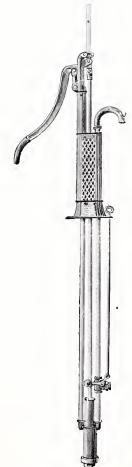


Fig. 1680.

While we do not usually recommend a double-acting pump for Wind Engine use, there are some places where it may be desirable to use them, and for such places there is nothing better than Fig. 1680. For sizes of suction pipe and general remarks refer to pages 513 and 514. We can furnish these both with and without the three-way attachment.

The rapidly increased use of well drilling machines drilling holes of from three to six inches in diameter, in various sections of the country, has created a demand for a pump that would be suitable for such wells. As will be seen by the illustrations, the Buckeye Casing Pump is so arranged that the upper cylinder and pipes connecting same to the pump-head will enter into and pass down the casing as far up as the base of the pump. By this manner of construction we avoid cutting off the casing, and by having a tight platform fitting on top of the casing of the well all surface water, toads, mice and other vermin are kept out of the well, and the water is absolutely pure.

Read remarks in regard to exchange of cylinders on page 543.

We can furnish these with Wind Engine Tops like Fig. 1680, but not with three-way attachment.

Read remarks regarding Buckeye Pumps on pages 540 and 541.

Figs. 1668 to 1673, page [539, illustrate pumps in operation.

All Casing Well Pumps fitted for 11-inch pipe.

WITH WIND ENGINE TOP AND THREE-WAY COCK - Fig. 1680.

Fig. 1681.

With 3-Way Cock. Without 3-Way C'k. Trade No. Size Cylinder. Set Length. Fitted For. Adapted For. \$15.00 Wells to 26 It. \$17.00 2253 -inch. 5 ft. 6 in. 1‡ pipe. 17.0024031  $1\frac{1}{2}$ 19.5066 ..  $^{2}$ 20.5018.00 255 66 46 .. 9 ft. 6 in. 24 30 ft. 33.00 30.00 257 5 18.5016.5011 230 6.6 21.5019.00 $1\frac{1}{2}$ 34 245 2 23.00 20.50260

#### FOR 3 TO 6-INCH PIPE WELLS-Fig. 1681.

Trade No.	Size Well.	Depth Well.	Price Enameled.	13-inch Brass.	18-inch Brass.
415	4 -inch.	50 feet.	3 -inch cylinder, \$15.00	\$17.00	\$18.50
417	3 66	100 "	$2\frac{1}{4}$ " 15.00	17.00	18.50
418	31 "	75 "	$2\frac{1}{2}$ " 15.00	17.00	18.50
137	4 "	50 "	3 " " 16.00	18.00	19.50
436	33 "	70 "	21 " 16.00	18.00	19.50
439	3 "	150 "	$\frac{21}{4}$ " 16.00	18.00	19.50

Trade Nos. 437, 436 and 439 with Wind Engine Tops. Order by this Catalogue Figure Number, stating size wanted.

## BUCKEYE FORCE PUMPS-CONTINUED.

#### FOR FIRE USE AND DEEP WELLS.

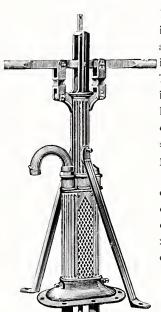


Fig. 1682 represents our Village or Fire Pump, Trade No. 100. It has a five-inch cylinder 5½ feet below the platform, adapted for 2½-inch suction pipe. It is jintended for wells 25 feet deep and under. The spout is threaded for coupling for 1½-inch hose. It is provided with two iron handles about four feet long, so that two or four men can use it in case of necessity. Thousands of dollars' worth of property is saved annually by this pump.

Trade No. 120 has the same size cylinder, but is intended for wells over 25 feet deep. It is fitted to place the cylinder down at the bottom of the well. It has 2-inch pipe between the upper and lower cylinder.

## BUCKEYE CASING PUMP,

WITH 9-INCH STROKE.



Fig. 1682.

Fig. 1683 is for Deep or Shallow Wells. Especially designed to secure the largest amount of water in a given length of time from a cylinder of medium or small diameter, by increasing the length of stroke to 9 inches, and providing snitable leverage in the handle. It increases the capacity of the pump nearly one-half, and overcomes the objections to the use of small cylinders as used in casing wells.

Fig. 1683.

Fig. 1682 —	Trade No	. 100;	5-inch	Cylinder:	; $2\frac{1}{2}$ -inch	Suction,	1‡-inch	Hose.			\$40.00
" 1682	"	120;	5 "	.66	2 "	6.6	11 "	4.6			40.00
Fig. 1683 —	Trade No	. 401;	3-inch	, enameled	l lower c	ylinder, o	capped i	nside,	5½ feet to	cylinder,	14.00
<b>. 4</b> 683	44 4	401;	3-inch	, brass low	er cylin	der, cappe	ed inside	e, 5 <del>½</del> fe	et to cyli	nder	16.00

All Casing Well Pumps have lower cylinder, capped inside, and fitted for 14-inch suction.

Order by this Catalogue Figure Number, stating size wanted.

## IMPROVED BUCKEYE LIFT PUMPS.

Has Patent Stamped Brass Valve Seat, Sectional Ventilating Standard, Reservoir Top, Funnel-Shaped Cap for Priming, Swivel Fulcrum, and is Anti-Freezing.

Furnished with either Porcelain or Brass-Lined Inside or Outside Capped Cylinder, with Five Feet Wrought Iron Set Length.

In the conception and manufacture of the Improved Buckeye Lift Pump, it was the intention to produce a pump, that, like the famous Buckeye Double-Acting Force Pumps—that now have a repu-



Fig. 1684.

Fig. 1685.

tation extending into all the civilized countries of the earth—should far surpass every other article of its class.

It will be seen at a glance that the Improved Buckeye, illustrated by the annexed cut, combines all the important features necessary to make it the handsomest, strongest, and most perfectly operating Lift Pump on the market.

It is the only Lift Pump made to-day with a Ventilating Standard, thus not only allowing the escape of impure air and gases from the well, but adding largely to the strength and artistic appearance of the pump.

appearance of the pump.

The wrought iron pipe constituting the set length is screwed into the head of the pump just below the spout. A vent hole located just above the cylinder, allows all the water to escape from the pump above frost line, thus preventing freezing in winter.

The Reservoir Top holds a sufficient quantity of water, when pumping, to produce a steady stream at the spout, and prevents the water overflowing at the top.

One of the greatest features of the Improved Buckeye Lift Pump, for which letters patent are pending, is its construction of the following separate and distinct parts, viz.: Base, Ventilating Section, Head, Fulerum, and Wrought Iron Set Length, all securely connected together with Screw Threads, thus allowing repairs for any of these parts to be supplied without incurring the expense of an entire new Standard.

The Improved Buckeye Lift Pump, with regnlar set length, is especially adapted for wells not over 26 feet deep, but by lengthening the connecting pipe and rod between the base and cylinder, they can be used in any depth well desired.

They are recommended for large stock farms, irrigation, etc., where it is necessary to raise large quantities of water from shallow wells to the surface of the ground only.

For 1	IAND US	SE ONLY, W	тн 5-Гоот	r Set Lune	TII.	FOR WIN	p Engin	E OR HAND.	WITH 5-I	ENGTH.	
Fig. No.	Trade No.	Size Cylinder,	Suction.	Enam. Cylinder.	Brass Cylind'r	Fig. No.	Trade No.	Size Cylinder,	Suction.	Enam. Cylinder. C	Brass Cylind'r.
1684 1684 1684	319 321 323	2½-in. 3 3½	1 ½-in. 1 ½ · · · 1 ½ · · ·	\$10.00 10.00 11.00	10.50 11.00 11.50	1684 1684 1684	299 301 303	2½-in, 3 " 3½ "	1½-in. 1½ " 1½ "	\$10.50 10.50 11.50	11.00 11.50 12.00

1684

1684

207

309

Price of Standard only, \$7.00.

Price of Standard only, \$8.00.

17.50 20.00

Order by this Catalogue Figure Number, stating size wanted.

## CYLINDER AND REPAIR LIST OF BUCKEYE PUMPS.

# 1

## NOTES.

Order all castings but Cylinders by letters, cast into same; order Cylinders by inside diameter at bottom, stating whether brass or porcelain-lined, and whether for shallow or deep well pump. Order all parts of Plungers by giving name, and diameter of lower cylinder.

#### Fig. 1686.

#### HANDLES.

Number.	Size of Bolt Hole.	Price.	Number,	Size of Bolt Hole,	Price.
D2	§-inch hole.	\$1.00	D99X	½-inch hole.	\$1.25
D120	8 " "	1.25	D130	1	1.50
D140	<u>s</u>	1.25	D170	1 " "	1.50
D2X	5	1.00	D62	표 66 66	1.50
D120X	5 46 46	1.25	D60	Cistern Pump.	1.00
D140X	5 44 44	1.50	D62X	å-inch hole.	1.50

#### HALF STANDARDS.

Number.	Hand.	ffandle ffole.	Price.	Number.	Hand,	Handle Hole.	Price
X	Right.	§-inch.	\$2.50	UU	Left.	½-inch.	\$3.00
XX	Left.	8 "	2.50	UX	Right.	1 44	3.00
XO	Right.	5	2.50	UUX	Left.	1 "	3.00
XXO	Left.	5 **	2.50	V	Right.	1 "	3.50
Y	Right.	8	3.00	VV	Left.	1 "	3.50
YY	Left.	§ "·	3.00	VX	Right.	1 16	3.50
YO	Right.	5 11	3.00	VVX	Left.	1	3.50
YYO	Left.	5 **	3.00	S	Right.	1	3.00
T	Right.	5 44	2.50	SS	Left.	i ··	3.00
TT	Left.	5	2.50	P	Right.		3.00
U	Right.	1 "	3.00	PP	Left.		3.00

### CYLINDERS FOR BUCKEYE PUMPS.

Size.	Description.	Kind.	Cylinder Only.	Cylinder Complete.	Size.	Description.	Kind.	Cylinder Only,	Cylinder Complete
3 -inch.	Donble.	Porcelain	\$3.00	\$5.75	2‡ x 18	*Lower.	Brass,	\$6.00	\$10.00
31 "	4.	6.6	3.50	6.60	2½ x 18	66	4.6	6.50	10.50
4 "	4.6	6.6	4.00	7.45	3 x 18		66	7.00	11.00
5 "	4.6	6.6	6.00	10.50	15-inch.	Upper.	• 6	2.25	$\frac{11.00}{2.75}$
D67	No. 70.	4.6	3.00	6.00	18 "	11.	4.6	2.37	$\frac{2.92}{2.92}$
2‡-inch.	*Lower.	6.4	2.25	4.50	$2\frac{3}{16}$ "	4.	66	$\frac{2.50}{2.50}$	3.10
21 "	4.6	4.	2.37	4.50	210 4		66	$\frac{2.75}{2.75}$	3.45
3 "	44	6.6	2.50	4.50	213 4	6.0	44	3.50	4.50
31/4	44	6.6	2.75	5.50	38 "		6.6	4.50	6.00
1 "	44	4.6	4.00	7.00	11 "	44	66	3.00	3.50
5 "	4.6	44	6.00	9.00	2½ x 18	Lower.	Porcelain	$\frac{3.00}{2.25}$	$\frac{3.50}{4.50}$
6 "	44 .	44	8.00	12.00	$2\frac{1}{2} \times 18$	44	44	$\frac{2.23}{2.37}$	$\frac{4.50}{4.50}$
2½ x 13	66	Brass.	5.00	8.00	3 x 18	4.4	44	$\frac{2.51}{2.50}$	$\frac{4.50}{4.50}$
$2\frac{1}{2} \times 13$	6.6	44	5.50	8.50	No. 21.	21 Upper.	Iron.	$\frac{2.30}{2.00}$	$\frac{4.50}{3.50}$
3 x 13	4.6	44	6.00	9.00	No. 21.	2½ "	44	$\frac{2.00}{2.00}$	$\frac{5.50}{3.75}$
3½ x 13	4.6	66	6.50	10.00	No. 19.	3 "	46	$\frac{2.00}{2.25}$	4.25

<sup>\*</sup>In ordering Lower Cylinders, state whether caps are inside or outside; unless otherwise ordered we always send outside.

## REPAIR LIST OF BUCKEYE PUMPS.

PLUNGERS, LEATHERS, ETC.

		PL	UN	GE	RS,	LE	EAT	HER	S, E	TC.						
Size Cylinder, In,	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	5	6	Siz	e Cyli	NDER.	In.	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4	5	6
PLUNGERS, ETC.							11	LEAT	HERS.		_					1
Trade No. 70, comp.		1.85					Lo		unger		\$0.23	. 2	5 .30	35	.40	50
Upper, complete	\$0.55	. 60	.70	.80	1.00			per	"		.17	.2	0[25]	.30	. 35	5 .43
Lower, Leather V've	.85				1.50						.07					
" Cage Valve " Long Cage "									ilve -		. 13					
Double, complete .	1.37			2.00	$\frac{1.50}{2.50}$				Set . Ive, co		$.60 \\ .45$			$\frac{1.00}{60}$		51.00
Cage only	48			2.00					nd Scr		.09					1 .1
Cage Bottom only.	.27	.30					,,,	CAL			.00		· · · · · ·			1
Long Cage " "	.52	. 55					Cvl		Caps, a	nν						
Stem V've for Cage	.20										.70	. 7	5 .80	.85	1.25	1.50
Upper Castings	.25					.60	Str	iners			.30	. 3	0 .30	.50	.50	.60
Lower " Cast Nut	.30	.35				- 60			$\operatorname{pling}$		.15					.15
	.11	.12	.13	.14	.16	.18			ve Sea		.20					)
PLUNGER RODS. Short, ½-inch pipe	00	00	00	00					asket "*		.06		$egin{smallmatrix} 7 & .08 \ 7 & 1.25 \end{smallmatrix}$			) 
Long, $\frac{1}{2}$ " "	1.35			1.35		: :	TIP	es, sno	rt g		87		52.00			
170fig, 2	1.00	1.00	1.00	1.00	• •			tons	<u> </u>		1.40	1 . 4	9 = .00	2.00		1
	RE	PA	IRS	S, IV	IAR	1IT	1'S	3-W	AY	coc	CK.					
Size of Main Pipes	š							INCHE	s.	<u>8</u>			1		11	
														1		
Iron Shells										1.50		1.	75		2.50	ð
Brass Stems										.85			85		1.00	0
Leather Valves for B										.05			05		.10	
Bolt and Nut for Va										.05			05		- 08	
Brass Stuffing Box .	· · ·								•	.30			35 25		. 50	
Lever and Ball									•	$.20 \\ .40$			40		. 23 . 60	
Rods										.10			10		.13	
Check Valve Leathe	ers									. 05			05		.00	
" Weigh	${f t}$ and ${f S}$	Screv	w							. 05			05		.00	
Iron Bushing									•	.07			09		-12	2
CASTINGS ONLY, FOR	BRASS	UPP.	ER C	YLIN	DER	s.	BR	ASS UI	PPER C		VDERS iameter			T C.	ASTI	NGS.
No. 1X No. 6X No. 2X	X0.4	I X	. s l	Vo. 11	I X o	13 N	0.17	14×19						·) 1 3 ,	c7 S	== 8 <u>8</u> x9
\$0,80 .75 .75	.80			1.00	$\frac{1}{1 \cdot 2}$	_	.00	$\frac{12.012}{2.20}$	1.50		$egin{array}{c} 2 & 1 & 1 \\ 2 & 1 & 1 \end{array}$			$\frac{-16}{2.5}$		3.25
												-		,	0 6	
									WIT							
3-inch for 2\frac{1}{2}, 2\frac{1}{2} and 3-	-inch C	ylm	der 1	բաղ	08	1 37										80.60
D14 for 3½ and 4-inch Union Rings for Goos	o Youl	er 14	ump	s and	Tra	(16 Y	0. 10	rump	,						•	$65 \\20$
Union Thimbles for G	loose-N	s Jecks		• •			•									.15
C IIIMI I IIIIIIIICA IM C	. ( , , , , , , , ,	CCK						EOUS		• •						. 10
No. 6X. Gomection	for W	indi	niII ]		)s										. 9	80.20
" 6XI. "	6.6	4.6		6.6	- Im	prov	$\operatorname{ed}$ .									.20
" 6XI. Bushed for	§ Pipe	, for	Cas	ing I	'ump	s $Transfer$	ide 3	Yos. 43	6, 439,	437.						.25
Wrought Extension f	or Win '- Han	dmil	II Pi	mp,	1X,	${}_{i}^{k}X, 2$	1, 22	f and :	24 mch	ies.					•	. 75
No. H. C. Connection	for He	u 11	ump, Poss	$_{\rm DS}$	±.X, 8											50
" I. Connection	on for	Casi	ng P	$\mathbf{n}_{1}$	s Tre	de N	ios. 1	17, 418								.30
" " X. "	6.6	"		"	6	· N	0. 4:	15								.30
⊱inch Pin and Keys f		iger	Rod	and	Han	dle .										.25
g	" Fnle	nun	ane	d Ha												.30
l " Handle, Fnleru																. 05
No, D34Y, Link {and 1-inch Air Chan																$25 \\25$
3-inch Enameled Shell																1.50
s-ar ir manicica onei.		iui .	r ratel	C 210.	. 10 1	ппП	,									, 0

## LAWN SPRINKLERS.





Fig. 2096.



Fig. 2097.

#### 8-ARM.



Fig. 2098.

#### BUCKEYE LAWN SPRINKLER.

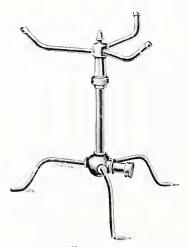


Fig. 2099.

Fig.	2096.	4-,	$\Lambda rm$	Sprinkler,	Nickel	Plated																	. :	\$6.50
* *	2097.	$_{6}$	* *	6.	4.6	1.6																		7.00
		•		4.6																				
6.6	2099.	$\mathrm{B}\iota$	ickey	e Lawn S <sub>1</sub>	rinkler	; fitted	f	11	8 4−i	ne	h :	He	se								Εŧ	iel	١.	2.00

## BUCKEYE LAWN MOWERS.

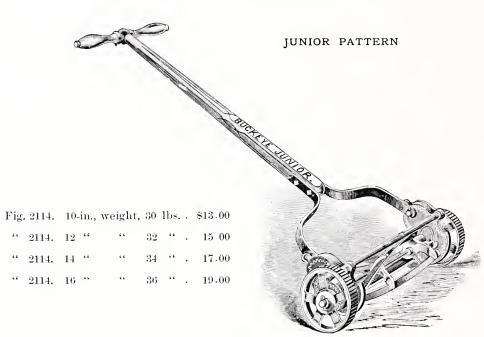


Fig. 2114.

Fig. 2114 represents the Buckeye, Junior, Lawn Mower, which for ten years has been one of the leading machines of the country, and now has the largest sale of any Mower manufactured. The peculiarity of this Mower is the absence of a roller, which, with the reel being placed directly in the centre of the machine, enables it to be used on terraces where any other Mower would fail to do good work.

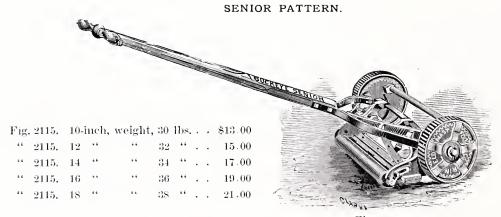


Fig. 2115.

Fig. 2115 shows another pattern of this popular Lawn Mower, and differs from Fig. 2114 in having a roller which enables the user to regulate the height of cut as desired, and makes this style preferable for uneven surfaces. It is highly finished, well made, of good material, and is warranted to please the purchaser. Write for special prices.

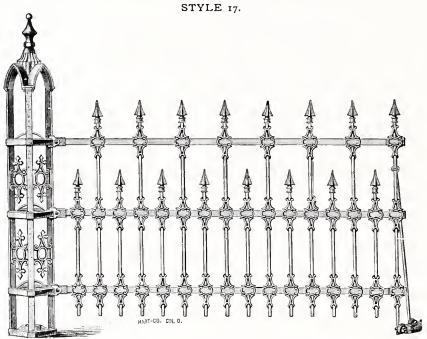


Fig. 2132.

Fig. 2132 shows our No. 17 Style, Spear Top, with 6 x 6 Corner Posts. For Public Buildings, Private Residences, Cemeteries, Parks, etc., etc.

The Buckeye Wrought Iron Fence is now well known the world over, as the sale of this standard article has reached mammoth proportions. Unlike many fences now offered for sale, the Buckeye is made with only one point in view, and that is to secure the best possible results from artistic designs, the use of superior quality of material, and the services of skilled mechanics—in short, the Buckeyé Fence embraces all that could be desired in beauty, finish and durability. We mention a few points of superiority worthy of your attention:

1st. The pickets pass through each and extend below the bottom rail, adding very much to the

beauty as compared with other punched rail fences.

2d. Each picket is secured at the junction of each rail by a portion of the rail being compressed into a notch in the picket.

3d. In producing the notches in the pickets no material is removed, consequently the picket is

not weakened, as is the case in many other fences.

In appearance, our Buckeye Fence is a combination of both the ornamental and plain 4th. punched fence, but in construction is far superior to either.

You will notice in our ornamental fence the pickets do not depend on the ornaments for

support, but are secured entirely independent of the ornaments.

6th. The Buckeye Fence is made complete in panels of five feet each (except when special lengths are required) by experienced workmen, with proper tools and facilities for doing the work as it should be done. Each order is thus made complete and fitted for its particular place, and when shipped is ready to set up at once without trouble, thus overcoming the annoyance of being shipped in boxes and bundles and to be built on the ground under great disadvantages, and out of just such material as is generally sent out in such cases.

7th. Our fences are all made standard height—pickets being full 36 inches long, or 39 inches from ground to top of picket. This height seems to be the most popular; however, the fence is so constructed that we can furnish it at any height desired. Our price is based on pickets 36 inches high and for longer or shorter lengths 1 cent per lineal foot is allowed, or charged extra, as the case may be.

8th. It is made of heavier and stronger material than any other tence manufactured. 9th. It is very evident that the frost will move any fence, more or less, whether on stone or east iron bases, consequently we furnish all our fences so they can be put in perfect line at any time without disturbing the foundations. Our fences can be built to suit any grade. If over one inch to the foot it should be so stated in the order.

10th. The Buckeye is the best fence in the world for agents to handle, as no mechanical skill

and but little time is required to erect it.

Can furnish fence made from special design, if wanted.

We issue a special catalogue, showing fifty designs. Prices quoted on application.

CONTINUED.

#### STYLE 5. TUBULAR IRON RAILING.

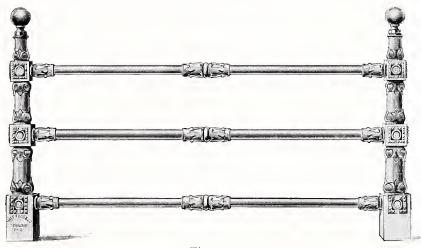
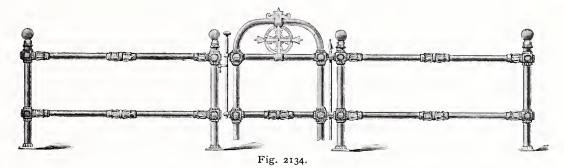


Fig. 2133.

This cut represents Style 5½ Cast Iron Post, with 1½-inch Tubular Railing ornamented with rosettes in centre and at ends. We make this style plain or ornamental, with or without spikes; either two or three rails, as desired.

#### STYLE 6. TUBULAR IRON RAILING.



This cut represents our two-inch Gas Pipe Post, Ball Top, and 1½-inch Gas Pipe Railing, ornamented, showing gate to match, all complete as the fence will appear when erected. We make this style Tubular Railing of 1½-inch gas pipe post and 1¼-inch gas pipe rail.

CONTINUED.

STYLE 5.

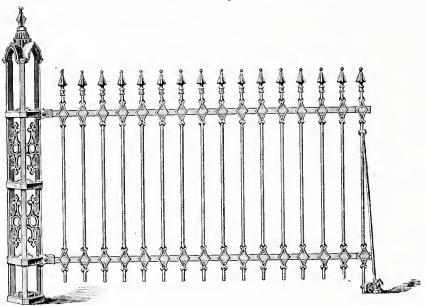


Fig. 2135.

Two-Rail, with Spear Top Picket, ornamental. This is a good, strong and well-proportioned Fence, just ornamental enough to make it handsome, and is a great favorite.

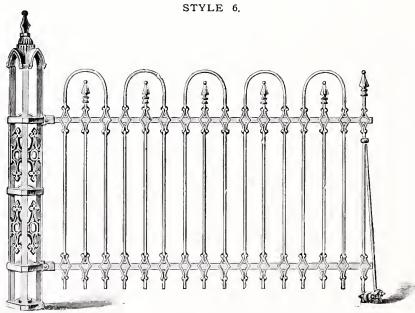


Fig. 2136.

Two-Rail, with 6-inch Bow, and Spear Picket, protected by the Bow. Very desirable and ornamental.

CONTINUED.

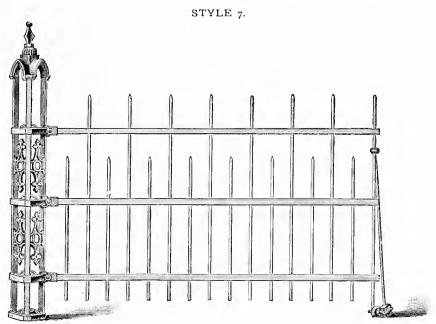


Fig. 2137.

Three-Rail, with Long and Short Pickets, Plain Top. This fence is light and open, but sufficiently strong for front or division fences, cemetery lots, etc., when a plain, neat fence is desired.

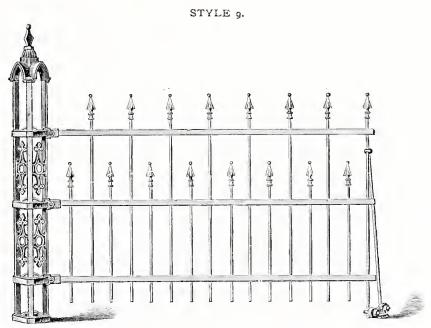


Fig. 2138.

Three-Rail, with Long and Short Pickets, Spear Top. This is one of the most desirable styles of plain fence we make. It is strong and durable; suitable for residences, public grounds, parks, etc. Chaste in appearance.

CONTINUED.

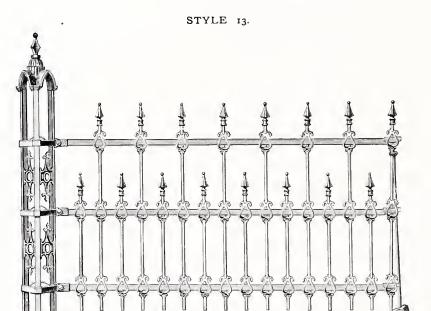


Fig. 2139.

Three-Rail, with Long and Short Pickets, Spear Top. Although not so elaborate as some other ornamental styles, yet the Harp Ornament makes a very handsome appearance.

STYLE 14.

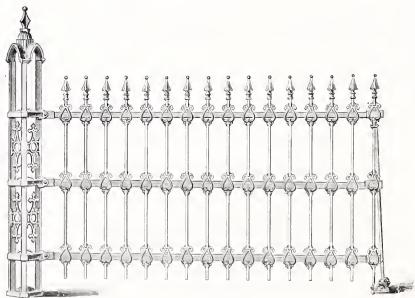


Fig. 2140.

Three-Rail, with all Long Pickets, Spear Top. This pattern is similar to Style 13, except it has all long pickets. Both styles are strong and durable, and suitable for residences.

Prices quoted on application.

CONTINUED.

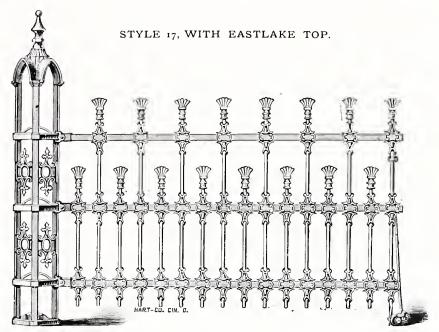


Fig. 2141.

Three-Rail, with Long and Short Pickets, Eastlake Top. This is one of our latest styles and is very beautiful in appearance.

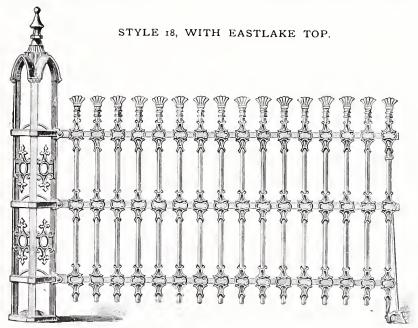


Fig. 2142.

Three-Rail, all Long Pickets, Eastlake Top.  $\Lambda$  new design, substantial and beautiful. Prices quoted on application.

CONTINUED.

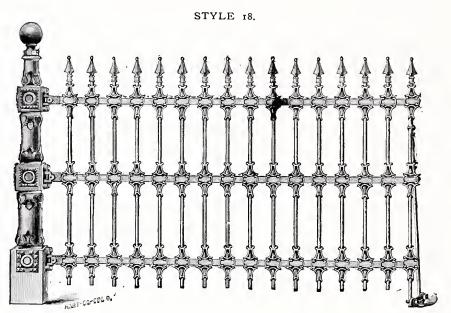


Fig. 2143.

Three-Rail, with No. 5½ Fancy Square Corner Post. A substantial and beautifully ornamented fence.

STYLE 23.

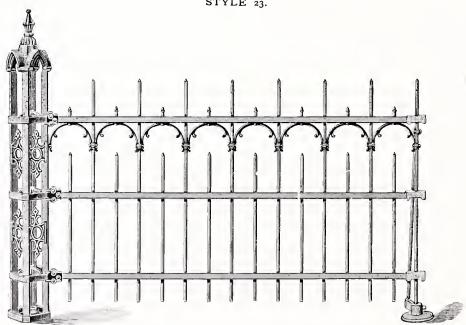
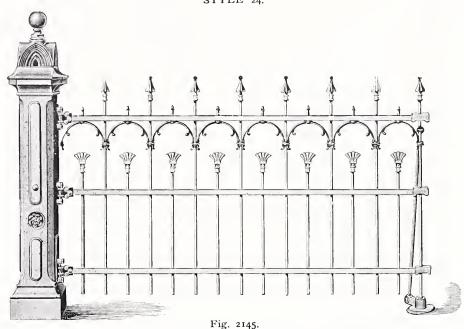


Fig. 2144.

Three-Rail, with Long and Short Pickets. Ornaments under Top Rail, No. 2 Post. This is a new ornament, and can be used on our Style 7, 8, 9, 11, 13 or 22 Fences. Prices quoted on application.

CONTINUED.

STYLE 24.



Three-Rail, with Long and Short Pickets. Ornaments under Top Rail, No. 8 Post. This fence can be made with Nos. 2, 4, 5, 5½ or 8 Posts.

STYLE 1.



Fig. 2146. Plain Walk Gate with No. 2 Posts. Prices quoted on application.

CONTINUED.

STYLE 2. ORNAMENTAL WALK GATE.

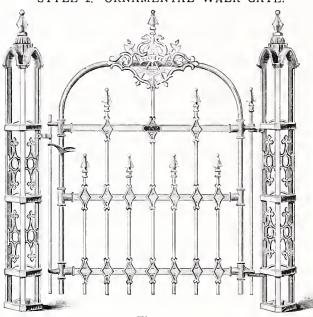


Fig. 2147.

STYLE 3. HEAVY ORNAMENTED WALK GATE, WITH No. 4 POSTS.

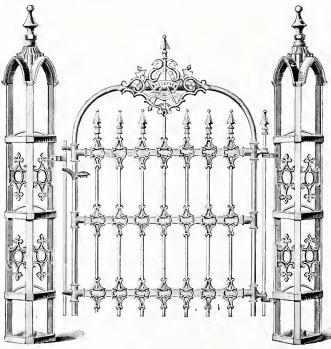
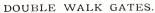


Fig. 2148.

Our Gates are all three-rail, and firmly built. The outside bow or frame being all one piece, makes them very strong, and will always keep their shape.

CONTINUED.



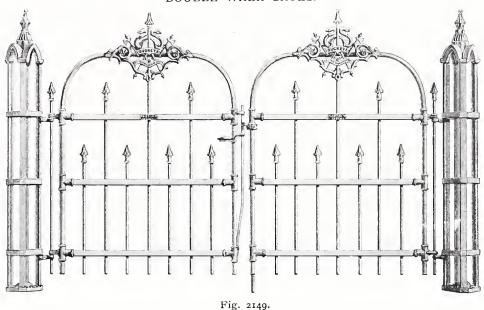


Fig. 2149 shows a set of Double Walk Gates, plain. We can furnish them ornamented, similar to styles 2 and 3, as our customers may desire. We use the new style Posts with these gates, same as shown with Single Walk Gates.

#### DOUBLE DRIVE GATES.

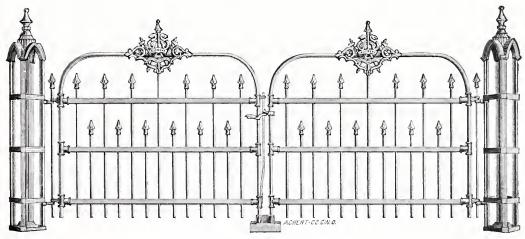


Fig. 2150.

The Gates shown in this cut are plain. We can furnish the same gates and Posts, heavily ornamented, to match any style of fence. We use the new style Posts with the gates, same as shown with the Single Walk Gates.

## STAIR RAILINGS.

No. 3. TUBULAR IRON RAILING.

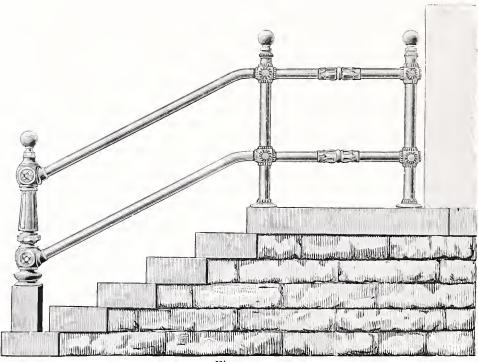


Fig. 2151.

Made of Gas Pipe. Suitable for court-houses, parks, etc.

#### No. 2. FANCY STAIR RAILING.

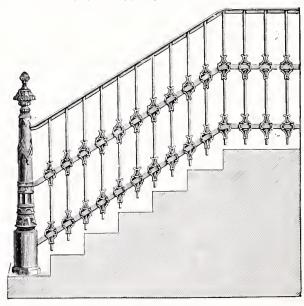
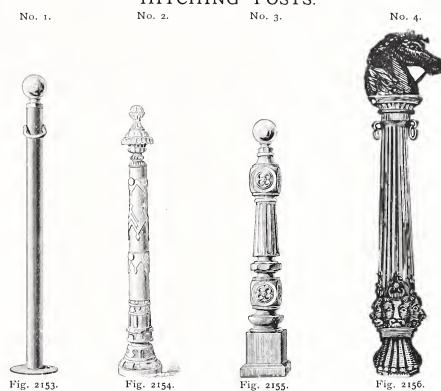


Fig. 2152.

Fig. 2152. Showing No. 5 Fancy Cast Post and Ornamented Pickets. We will ornament these Railings in any style desired.

## PLAIN AND ORNAMENTAL POSTS.

HITCHING POSTS.



#### FENCE, GATE AND CORNER POSTS.

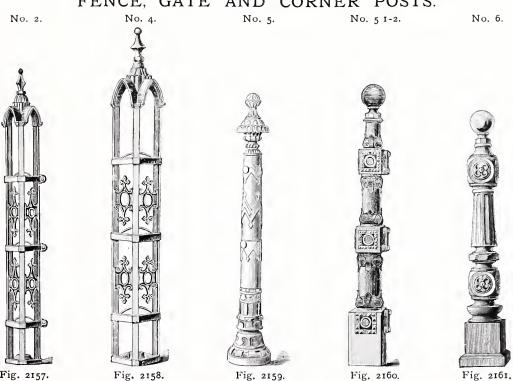
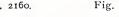


Fig. 2157.

Prices quoted on application.

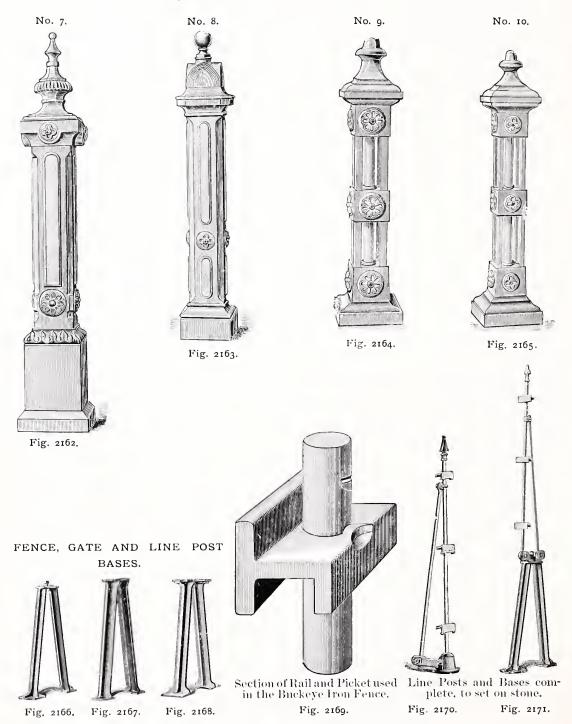
Fig. 2160.



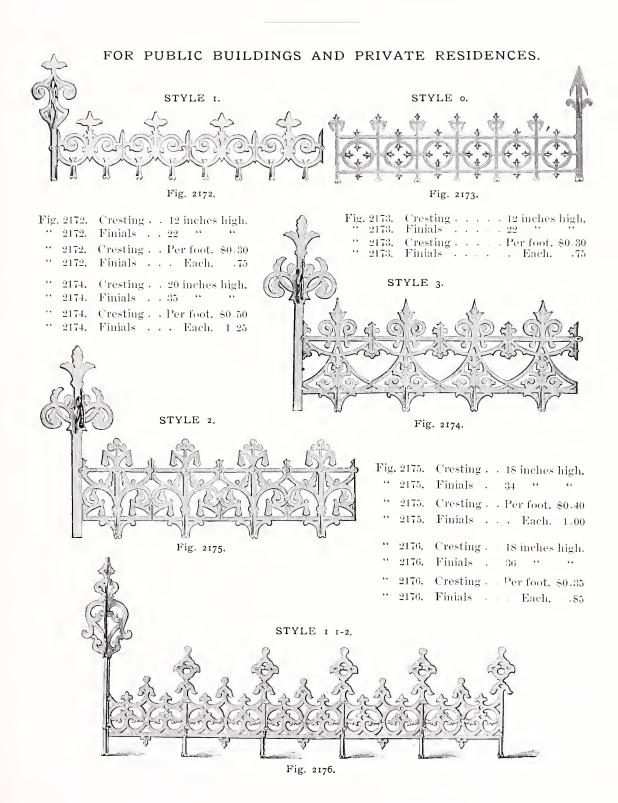
## PLAIN AND ORNAMENTAL POSTS.

CONTINUED.

## FENCE, GATE AND CORNER POSTS.



## CAST IRON CRESTINGS.



PAGE	Page
Bath-tubs, copper 284, 285	Boston self-closing urinal cocks 231 "Woven Hose rack 713
" " enam, iron recess with Plym-	" Woven Hose rack 713
outh fixtures 278	Bowls, closed
" enam. iron, roll rim with Oxford	Boxes, service 628-630
fixtures	Boynton's adjustable Alligator pipe wrench, 486
fixtures and shower combi-	Brace, ratchet
nation , , , 280	Brackets, gas
" "fibre, copper-lined 274	for lavatories, brass 322, 325
" porcelam-lined 264-271	" " iron 327
" roll rim	201103
" steel-clad	" tanks and seats, brass 325, 326
Ruth waste and book 994	Brass cleanouts
Bath waste and hook 294	" closet screws and washers 437
·· · · · trap, Paragon · · · 283	" ferrules
Beam hook	" ferrules
Bedfordshire urinals 347	" joint cover for marble slabs
Beer cocks	" stop cock
Belting	ti fittings mullooklo notten yough 50
Relt nunch 502	" " " " " finished . 59
Belt punch	" " finished 59 " " fine thread, 60 " " cast iron pattern, rough 60
Bends, lead	" cast iron pattern, rough . 60
Bending $\sin x$ , $x$ , $x$ , $x$ , $x$ , $x$ , $x$	" towel racks 441
Berkshire washout closets	Branch tees
Bibb ends, hose	Branches, globe, special castings
" lever bondle 215	Breast drills
" lever handle	Brock's chain tongs
" Doberty 996 997	Bronze 184
" Moore's 232, 233	Brouze
" telegraph handle	Brown's adjustable pipe tongs 487
" Peck's improved	Brushes
Bit brace die holder	Buckeys crosting 749
Bidet copper	" fence, gate and corner nosts 741, 742
Bidet, copper	Brown's adjustable pipe tongs       487         Brushes       467         Buckets, Cooper, Victor       538         Buckeye cresting       743         "fence, gate and corner posts       741, 742         "hitching posts       741         "lawn sprinkler       718         "lawn mowers       724         "pumps and parts       539-548         "stair rail       740         "wrought iron fence       730-736         Buffers for closet seats       446         Burner cleaners       195
" drill press 503	" lawn sprinkler 718
' hammer	" lawn mowers
" hannner	pumps and parts 539-548
" pincers 503	stair rail
" shoeing hammer 503	Buffers for closet seats
" tongs 503	Burner cleaners 195
" tongs 503 Blake pipe hangers	Burner cleaners
Blind flanges	Bushings 18, 19, 38, 39, 59, 60
Plow pipe	Butterfly valves, brass body 88
Blowers Sturtevant	fron body
" " kerosene 672	0
Boilers, range, copper	C
heavy pressure 433	Caldwell hose straps
" " iron	Calipers
Boiler couplings	Callaban's cement 103
" tube brushes and cleaners 141-143	Candlesticks
"tubes, standard dimensions 10, 11	Caps, hose 71
" valves	" cast iron 18, 19
" drill, Smith's 500	" malleable
	" malleable
" " bower	" " standard size 12-1;
Bolts	" " pipe 700
" for east iron sinks 423	" " fittings, weight of 700
Bore counter	
"Boss" hose pipe	" iron soil pipe 40;
Boston brass pipe hangers	" brass turmat traps
" coupling	Caulking chisel
" self-closing basin cock 236	Ceiling plates · · · · · · 44, 43
" hopper" 236	Cellar traps, iron 429
" pantry " 236	Cement, Callahan's 10
" stops	gasatters